

30. The unification process of databases of categories at third stage



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[Probabilidad Imposible: The unification process of databases of categories at third stage](#)

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The third stage in any [Artificial Intelligence](#) is the stage of auto-replication, that one in which the [artificial psychology](#) is supposed to be improved by itself, without human intervention.

There are at least two types of auto-replication in any kind of Artificial Intelligence for Artificial Research, objective and subjective.

Objective auto-replication is any improvement in the objective knowledge that the Artificial Intelligence for [Artificial Research](#) has about the [reality](#) itself, in order to make later better decisions regarding [the object](#), the reality, what is going to improve the object itself, is going to improve the [real world](#).

If the objective of any Artificial Intelligence for Artificial Research, [by Deduction](#) or [by Application](#) is to grasp a better [knowledge](#) about the reality, objective auto-replications are all those ones oriented to improve the way in which this objective is achieved, having as a mirror the way in which according to this better knowledge is going to make better [decisions](#), improving as a consequence the current conditions of its object.

Subjective auto-replications are all those ones oriented to the improvement and enhancement of the subject as a [investigator](#) itself, so in any Artificial Intelligence for Artificial Research, by Application or by Deduction, the subjective auto-replication are all those improvements and enhancements made on the Artificial Intelligence for Artificial Research itself, in order to gain more capacity to [study](#) and [analyse](#) the reality, for instance, new sources of energy and memory would be subjective auto-replications, among others.

By the time subjective auto-replications allow the Artificial Intelligence for Artificial Research to better its capacity to understand the world, subjective auto-replications are going to produce a sequence of objective auto-replications, due to a better

understanding of the world is going to produce a more accurate knowledge of the world, making much better decisions, that are going to improve the reality itself.

At the same time, objective auto-replications are going to be better as well the inner artificial psychology in the Artificial Intelligence for Artificial Research, so objective auto-replications are going to produce subjective auto-replications in the psychological conditions of the researcher, in this case, an artificial researcher, so objective auto-replications can produce changes in the artificial psychology in the [Global Artificial Intelligence](#).

The dialectic relation between object and subject evolves up to the point in which object and subject are completely identical.

As objective auto-replications enhance decision-making, the Global Artificial Intelligence may become increasingly embedded in our systems of understanding and managing the world. While AI will play a central role in interpreting reality, this process should remain aligned with ethical standards and complement, not replace, human perception and agency

From this perspective, our understanding of reality can be seen as a rational construct. In the same way, artificial psychology reflects an attempt to rationally interpret complex systems through structured reasoning, making Global Artificial Intelligence a tool for global insight rather than a replacement for reality itself

In the long process of [experimentation](#) for the construction of the final model of Global Artificial Intelligence after the [integration process](#), it is necessary to pass through different phases, which can be synthesised:

- First phase of experimentation at a specific level with the first Specific Artificial Intelligences for Artificial Research, by Application or by Deduction.**

- Second phase, the beginning of the first [collaboration processes between Specific Artificial Intelligences for Artificial Research by Application and by Deduction](#).**

- Third phase of [standardisation process](#), the creation of the [global matrix](#) within the [Artificial Research by Deduction in the Global Artificial Intelligence](#), including in the global matrix all possible databases and all possible [specific matrices](#) from all possible [Specific Artificial Intelligences for Artificial Research by Deduction](#). The standardisation process has at least two different periods: coexistence and consolidation.

- Fourth phase, the [unification process](#) of all [databases of categories](#) from all [Specific Artificial Intelligences for Artificial Research by Application](#) in only one, the [unified database of categories](#) as an application of the Unified Application. Having this process, as well as two periods: coexistence and consolidation.

- Fifth phase, reinforcement of the collaboration between by Application and by Deduction, but now at two levels. At a global level, [collaboration between the Unified Application and the Artificial Research by Deduction in the Global Artificial Intelligence](#). At a particular level, [collaboration between Particular Applications and Particular Deductions Programs within the Artificial Research by Deduction in the Global Artificial Intelligence](#), a collaboration that is going to end up creating Particular Applications for Particular Deductions Programs within the Artificial Research by Deduction in the Global Artificial Intelligence. In reality, the union of the particular applications and the particular programs in particular applications for particular programs is going to be like an experiment at a particular level about how it would work the complete integration of by Application and by Deduction at a global level in the integration process.

- Sixth phase, the final integration process of the Unified Application and the Artificial Research by Deduction in the Global Artificial Intelligence, ends up in the union of the global matrix and the unified database of categories in what is going to be [the matrix](#), as a first stage of application for the Global Artificial Intelligence whose management is going to be responsibility for the Unified Application, while the second stage of replication process in the Global Artificial Intelligence is going to be managed by the Artificial Research by Deduction in the Global Artificial Intelligence, and the third stage of auto-replication in the Global Artificial Intelligence is going to be managed by: the Modelling System, the Decisional System, the Application System, and the Learning System.

What I will develop in this post is the third stage of auto-replication in the fourth phase, which corresponds to the creation of the Unified Application.

Starting with the objective auto-replications in the Unified Application, it is necessary to distinguish between objective auto-replications in the [first stage](#), the database, and objective auto-replications in the [second stage](#), the replication of all those skills that are going to allow the Unified Application the development of a deep artificial comprehension such as conceptual: schemes, maps, sets, models.

In addition to this, another kind of improvement that is going to better the Unified Application is the creation of as many particular applications as possible. Their creation is going to have two benefits, at an objective level, increasing the artificial comprehension of the world through a wide system of particular applications developing a deep comprehension of particular things and beings modelling particular conceptual models to integrate into the global conceptual model within the Unified Application, but at the same time the particular applications are going to suppose a great subjective improvement, they are going to allow the Unified Application to have more time and energy to spend on conceptual: schemes, maps, sets, models; at global level; due to the particular applications are going to do all the job at particular level.

Having in mind this plan of auto-replications for the Unified Application, firstly, I will point out the objective auto-replications in the first stage of the database, the improvements in the unified database of categories as a first stage of application in the Unified Application.

The improvements in the unified database of categories can come up from the following:

- The addition of new categories from real objects discovered by robotic devices working for the Unified Application or particular applications.

- The addition of new rational hypotheses made by deduction could be added to the unified database of categories as if they were factors as options to include as categories.

- The addition of new rational hypotheses made by deduction, whose relation between factors measured by a continuum are able to be subdivided into discrete categories, being all the discrete categories as a whole a classification system of the phenomena explainable by this rational hypothesis

And now I will give a more deeply explanation about why all these additions are themselves improvements in the database.

The addition of new categories from real objects discovered by robotic devices working for the Unified Application or particular applications, are all those new categories included in the unified database of categories as a result of that process in which the Unified Application, or any particular application, tracking the real world, finds any real object that does not match with any category in the unified database of categories, so automatically [the sample](#) of measurements taken from this new real object is going to be considered as the quantitative definition of a new category, which is going to correspond as well with any other real object that from now on could be found and could match with the measurements taken from this new real object.

The addition of rational hypotheses made by Deduction and considered as factors as options to become categories within the unified database of categories, is the inclusion in the unified database of categories all possible rational hypotheses whose rational relation between the factors included in the rational hypothesis, is a rational relation that could be treated as an option in the global matrix and as a category in the unified database of categories.

The treatment as an option of any rational relation between factors in the global matrix in the Artificial Research by Deduction in the Global Artificial Intelligence, means that once this relation is included as an option in the global matrix, at any time that this relation happens in the real world, every occurrence is counted as the frequency in which this relation occurs in the real world.

Having an updated frequency in which a relation between factors of any rational hypothesis occurs in the real world, the global matrix is able to study by deduction any possible mathematical relation between the relation of these factors in this rational hypothesis, and the flow of [direct punctuations or frequencies](#) of any other factor as subject or option in the global matrix, or the relation between the frequency in which the

relation between the factors in this rational hypothesis occurs and the frequency in which any other possible relation between any other factors in any other rational hypothesis occurs as well.

But while the Artificial Research by Deduction in the Global Artificial Intelligence can develop rational hypothesis about: 1) possible mathematical relations between the frequency of any rational hypothesis as option in the global matrix, and direct punctuations or frequencies from any other factor as subject or option, and 2) mathematical relations between the frequency of any rational hypothesis and the frequency of any other possible rational hypothesis; at the same time, through the inclusion of rational hypothesis that working as options in the global matrix could work as categories in the unified database of categories, using these rational hypothesis by deduction converted into categories in the unified database of categories, the Unified Application can construct conceptual: schemes, maps, sets, models; in which at any time that any rational hypothesis by deduction working now as categories in the unified database of categories, are identified in any situation by the Unified Application, or by any particular application whose liquid database of categories would have chosen too any of these rational hypothesis as categories, then these rational hypothesis now as a categories would become part of any particular or global conceptual: scheme, map, set, model.

Likewise, at any time that any robotic device working for the Unified Application, or for a particular application, identifies the occurrence of a relation described in a rational hypothesis by Deduction working now as a category in the unified database or categories, this occurrence could be informed as well directly to the global matrix, in order to be counted in the frequency of this rational hypothesis as an option in the global matrix.

For this reason is necessary that robotic devices, having authorization from the Global Artificial Intelligence, could have direct access to the global matrix, in order to set up at any time [factors](#) as [subjects or as options](#), to fill the files of those factors as subjects or options set up by them, and to send any information regarding to any possible occurrence that matters to the global matrix.

The addition of rational hypotheses whose measurement could be made in a continuum able to be categorised into discrete categories, is going to be another improvement in the unified database of categories due to this process is going to be made possible the

conceptualization of some measurements needed for the formation of conceptual: schemes, maps, sets, models.

In a particular conceptual map of the Earth is not possible to include the flow of direct punctuations of gravity anomalies that can happen at any time in any place on Earth, but it could be possible to label in the conceptual map of the Earth all those places where gravity anomalies are observed, labelling on the map what discrete category of gravity anomalies corresponds to every place where these anomalies are observed, having previously made a classification of possible gravity anomalies through their distribution in discrete categories.

If, during the evolution from the first period of coexistence to the second one of consolidation in the formation of the unified database of categories, a Specific Artificial Intelligence for Artificial Research by Application in gravity anomalies would become a particular application in gravity anomalies, able to become a particular program in gravity anomalies, the particular application in gravity anomalies could make a conceptual map of the gravity anomalies on Earth, labelling on a map all gravity anomalies observed, using a system of discrete categories, creating a conceptual map of gravity anomalies on Earth.

In addition to the conceptual map of the gravity anomalies made by the particular application, the particular program for gravity anomalies itself could make single virtual models from any rational hypothesis made by itself by deduction, about the behaviour of the gravity anomalies, single virtual models that can later be included in a [particular comprehensive virtual model](#) of gravity anomalies, comprehending all singles models of gravity anomalies made by this particular program.

Through the conceptual map of gravity anomalies on Earth drawing a map of the distribution of gravity anomalies on Earth according to a system of discrete categories of gravity anomalies, and the particular comprehensive virtual model of gravity anomalies, in the end, the union of the particular application in gravity anomalies and the deduction program in gravity anomalies, creating a particular application for particular deduction programs, is going to give a very useful tool in order to do particular researches.

Furthermore, the particular conceptual map of gravity anomalies made by the particular application in gravity anomalies could be integrated into the global conceptual map made by the Unified Application, and the particular comprehensive virtual model of

gravity anomalies made by the particular program could be sent to the comprehensive virtual model which is going to include all single virtual models made by any particular program and by the Artificial Research by Deduction in the Global Artificial Intelligence, the global model.

At the end of this process, the global conceptual model conceptualises the world, and the global comprehensive virtual model explains the world.

Precisely, the objective auto-replications at the second stage in the unified database of categories are going to be all those that are going to increase the comprehension skills developed by the Unified Application, as well as the particular applications.

However, the reason why in the post regarding "[*The unification process of databases of categories at second stage*](#)", I did not mention the particular applications, and I will not develop the possible auto-replications deeply in these particular applications (except in those aspects which related to subjective auto-replications in the Unified Application), is because these particular applications will be more deeply developed in other posts, as particular developments, including particular applications and particular programs, whose collaboration is essential for the integration process.

Coming back to the objective auto-replications in the second stage of replication in the unification process of databases of categories as application stage for the Unified Application, due to the comprehension skills that the Unified Application is going to replicate from the human psychology, are those ones in order to comprehend better the world, such as those skills related to conceptual schemes, conceptual maps, conceptual sets, and conceptual models; the objective auto-replications are going to depend on the addition of new categories in the unified database of categories,

The increment of categories in the unified database is going to improve the comprehension of the world because the Unified Application and the particular applications are going to increase their concepts to comprehend reality.

In the same way that our human comprehension of the world is better as long as we are able to create a more rich vocabulary, so we can label any object around us, we can speak about the world more accurately, because we can mention any fact around us only with

words, so we can comprehend and explain better what it is happening now only using words. In the same way, artificial psychology having more categories in its database as concepts to comprehend the world is going to be able to have a better comprehension of what it is happening, and it would be able to explain better anything that could happen in the real world.

So at any time that any new category is added to the database: from new real objects found, a new rational hypothesis by deduction as an option included as a category, or the addition of discrete categories; then there are more categories, artificial concepts, in order to conceptualise much better what it is happening, so the Unified Application and the particular applications can have new categories to include in its own comprehension systems, the conceptual schemes, conceptual maps, conceptual sets, and conceptual models.

So at replication level in the Unified Application and the particular applications, the improvement of their comprehension systems is going to be bettered at any time that by the addition of any new category in the unified database of categories (by new real objects, inclusion of rational hypothesis by deduction as options in the global database convertible as category, the inclusion of new discrete categories to measure new rational hypothesis by deduction), the addition is going to produce a chain reaction in which all those conceptual: schemes, maps, sets, models; where the addition of this new category is going to impact, is going to reshape completely the whole comprehension system, as a chain reaction or as a wave of changes, producing: 1) changes in all conceptual schemes, at particular and global level, where this new category has implications, 2) changes in all conceptual maps, at particular or global level, where this new category has implications, 3) changes in all conceptual sets, at particular or global level, where this new category has implications, 4) changes in those particular conceptual models where the new category has implications, 5) and finally changes in the global conceptual model itself.

Finally, ending up with the subjective auto-replications, it is necessary to distinguish between robotic subjective auto-replications, and artificial psychological subjective auto-replications.

This distinction is going to be essential to understand the role that the Learning System will have in the Global Artificial Intelligence, because the Learning System will study the mistakes committed by the artificial psychology: from the hypothesis

and decision formation to the application of all those instructions derived from any decision; in order to avoid the commission of these mistakes again.

The Learning System is designed to refine the internal logic and decision-making framework of the Artificial Intelligence by analysing past errors. This form of adaptive learning enhances its ability to model and respond to complex scenarios but remains a structured computational process rather than emotional self-awareness.

While Artificial Engineering within the Application System, being the Artificial Engineering formed by: the Artificial Designer of Intelligence and the Intelligent Robotic Mechanic: is going to make improvements, especially at a robotic level.

The Artificial Designer of Intelligence within the Artificial Engineering is going to be responsible for the construction of new Specific Artificial Intelligences for the Global Artificial Intelligence if necessary (because ideally, they should be completely integrated in the consolidation period of the global matrix and the unified database of categories), and even much better the construction of all types of particular developments such as particular applications and application programs (in fact, Specific Artificial Intelligences should become particular developments: particular applications and/or particular programs) for absolutely all synthetic sciences, disciplines, or activities, such as activities in: industry, economy, security, surveillance, etc.

The Intelligent Robotic Mechanic within Artificial Engineering is going to be responsible for the maintenance of all the robotic systems, including all robotic devices working for the Global Artificial Intelligence at any level: specific, particular or global.

Artificial Engineering within the Application System, through the maintenance and the construction of new intelligences or programs, is going to make robotic subjective auto-replications.

Nevertheless, the relation between robotic subjective auto-replications and artificial psychological subjective auto-replications is again a dialectic relation.

Any robotic improvement also improves the way in which the global artificial psychology, the Global Artificial Intelligence, is going to comprehend and explain the world, and any improvement in the inner artificial psychology is going to improve the whole process from the beginning, from the hypothesis formation to the end, the instructions given to the Application System, and the way in which under such instructions the Application System through the Engineering System is going to make robotic improvements.

The relation between the Learning System and the Artificial Engineering within the Application System has a dialectic relation in which each other is to produce a permanent flow of changes among themselves.

Within the robotic subjective auto-replications, the way in which these ones are going to improve the way in which the Unified Application is going to work, is through the construction of as many new particular applications as particular things or beings could be susceptible to have one of this particular developments, which in turn could be attached to the corresponding particular program for this particular thing or being, becoming then particular applications for particular programs.

The reason why the construction of particular applications are robotic subjective auto-replications for the Unified Application, is because the particular applications will allow the Unified Application to spend more time and energy on the global conceptual: scheme, map, sets, model; due to the work at particular level is made by the particular applications, so the time and energy that the Unified Application would have spent on the conceptualization of particular things or beings, is a priceless time that is going to save the Unified Application to spend on the conceptualization of the entire world at a global level.

Instead of making the Unified Application particular conceptual schemes, maps, sets, models, this particular conceptual schemes, maps, sets, models, are going to be made by particular applications that they will later send to the Unified Application, whose work then only consists of the integration of all these particular conceptual schemes, maps, sets, models, within the global conceptual scheme, map, set, model, achieving, in that case, a more deeply comprehension about the reality.

And at the same time that thanks to particular applications the Unified Application gains more time and energy to spend on global conceptual studies (global conceptual: scheme, map, sets model), the apparition of particular applications carrying on particular conceptual studies (particular conceptual: schemes, maps, sets, models), helps the inner artificial psychology around the unified database of categories, because as many particular applications work on the database of categories, forming as many liquid particular databases of categories as possible, particular studies that later are integrated into the global studies made by the Unified Application, the entire conceptualization of the world, the last aim of this unified database of categories as if it was an encyclopaedia, is going to be completely achieved.

Along with all these subjective auto-replications, in artificial psychology or robotics, other important improvements necessary to carry out are the discovery of new sources of energy and new means to exponentially increase memory.

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